

EPAUnited States Environmental Protection Agency
Washington, DC 20460**Work Assignment**

Work Assignment Number

03-06

☐ Other ☐ Amendment Number:

Contract Number

EP-C-08-010

Contract Period 12/16/2008 To 11/30/2012

Base Option Period Number 3

Title of Work Assignment/SF Site Name

Outreach Products & Activities

Contractor

SCIENTIFIC CONSULTING GROUP, INC, THE

Specify Section and paragraph of Contract SOW

2.2, 2.3

Purpose:



Work Assignment



Work Assignment Close-Out



Work Assignment Amendment



Incremental Funding



Work Plan Approval

Period of Performance

From 05/10/2012 To 11/30/2012

Comments:



Superfund

Accounting and Appropriations Data



Non-Superfund

Note: To report additional accounting and appropriations data use EPA Form 1900-69A.

SFO
(Max 2)

22

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:

12/16/2008 To 11/30/2012

Cost/Fee:

LOE:

This Action:

Total:

Work Plan / Cost Estimate Approvals

Contractor WP Dated:

Cost/Fee:

LOE:

Cumulative Approved:

Cost/Fee:

LOE:

Work Assignment Manager Name John McKernan

Branch/Mail Code:

Phone Number 513-569-7415

FAX Number:

(Signature)

(Date)

Project Officer Name Verla Sutton-Busby

Branch/Mail Code:

Phone Number: 202-564-6808

FAX Number:

(Signature)

(Date)

Other Agency Official Name

Branch/Mail Code:

Phone Number:

FAX Number:

(Signature)

(Date)

Contracting Official Name Renita Tyus

Branch/Mail Code: CPOD

Phone Number: 513-487-2094

FAX Number: 513-487-2109

(Signature)

(Date)

PERFORMANCE WORK STATEMENT

EPA Contract Number: EP-C-08-010

Contractor: Scientific Consulting Group, Inc. (SCG)

EPA Work Assignment Number: 03-06

TITLE: Outreach Products and Activities for Radio Frequency Identification Technologies under the Advanced Monitoring Systems Center

PERIOD OF PERFORMANCE: Date of Issuance through November 30, 2012

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BACKGROUND

The objective of this Performance Work Statement (PWS) is to develop outreach materials and conduct technology transfer activities to disseminate information on the performance of environmental monitoring technologies that provide data to identify and enumerate hazardous chemicals and materials being transported across international borders and within the United States. There are thousands of shipments of hazardous wastes that enter the United States each year. These shipments contain materials that may be hazardous to human health and the environment and that must be properly handled, recycled, or disposed of according to appropriate regulatory standards. EPA Region 6 has identified the need for effective and timely methods for tracking cross-

particular gap exists in EPA's ability to track shipments of hazardous wastes originating in the Mexico border zone and crossing into the United States. This is important in light of the significant amount of trade taking place between the southwestern United States and Mexico. For example, Texas leads all U.S. states in surface trade with Mexico with \$10.1 billion in trade. In 2010, Texas became the first state to do more than \$100 billion in trade with a foreign nation, Mexico, reaching \$114 billion in total bilateral trade.

In support of this need, the EPA Environmental Technology Verification (ETV) Program verified the performance of two radio frequency identification (RFID) devices for tracking hazardous waste shipments across international borders (published September 2009). It is anticipated that monitoring technologies such as these will provide much needed information on the location, quantity, and type of environmental pollutants being transported. This information could help local, state, and regional representatives make informed decisions during chemical/material releases from transportation incidents, and assess potential risks to humans through exposure to contaminated air, soil, and water. The time saving benefit from using RFID technology will also assist with cross-border movement of goods and reduce emission from idling trucks. A key component in these efforts is the dissemination of information on the availability and performance of RFID technology, including those tested by the ETV Program.

PURPOSE

The purpose of this work assignment is to define support needed to develop outreach materials and conduct technology transfer activities for advanced environmental monitoring technologies, such as the RFID devices. All information presented through these outreach activities shall be based upon the results of ETV verification testing of RFID devices for identifying and enumerating hazardous chemicals/materials being transported across international borders—these results can be found in the ETV verification reports and statements (available at <http://www.epa.gov/nrmrl/std/etv/vt-ams.html#radio>). Outreach activities will serve to disseminate the results of the verification tests in written and verbal forms and inform stakeholders, such as local, state, and regional officials, about the verified technologies and their applicability to transportation-related releases of chemicals/materials to water sources, air, and soil.

Under this work assignment, contractor support shall be needed to:

- Finalize the draft presentation on RFID technology verification results for posting to EPA and other web sites, and for presentation at designated events
- Arrange a presentation (eg., a platform, poster or display exhibit) of RFID results from verified RFID technologies at relevant national/international events
- Conduct technology transfer webinars to disseminate RFID verification information to targeted audiences.

TASK DESCRIPTIONS

The contractor shall furnish all personnel, material, equipment, and services necessary to perform the work outlined in the following tasks and subtasks.

Oversight of this work assignment will be provided by the EPA WA COR and/or EPA technical lead(s). EPA Region 6 technical expert(s) will be identified by the EPA WA COR via technical direction once the contractor's work plan has been approved. The EPA WA COR and EPA technical lead(s) and expert(s), as assigned, shall receive copies of all deliverables under these tasks. Once confirmed, date(s), topic, and targeted location (as applicable) for event-specific outreach activities will be provided to the contractor via technical direction from the EPA WA COR.

TASK 1: Prepare Work Plan

The contractor shall prepare a work plan and cost estimate in accordance with the terms and conditions of the contract. The contractor's work plan should contain a break-out clearly specifying estimates (LOE, ODCs, etc.) associated with performing each of the Tasks 1 through 4 (and subtasks) as outlined in this PWS.

TASK 2: Work Assignment Kick-Off Meeting

A work assignment kick-off meeting shall be conducted between the contractor project team, the EPA WA COR, and EPA Region 6 technical expert(s) to discuss project planning, details, activities, and timelines. The kick-off meeting shall be conducted via conference call within two (2) weeks of work assignment being approved. The contractor shall develop meeting minutes, including key discussion points, action items, and a schedule, and provide to the EPA WA COR.

The contractor shall also participate in periodic calls (approximately bi-monthly) with the EPA WA COR and/or EPA technical expert(s) to discuss progress and relevant technical issues related to the work assignment tasks.

TASK 3: Presentation Preparation and Finalization

Under the previous work assignment (EP-C-08-010, WA #1-06), the contractor delivered a draft technical presentation to be used for presenting on the ETV RIFD verification results at informational meetings/training sessions/webinars, etc. (see **Appendix A** of this PWS for the current draft presentation). Under this task, the contractor shall coordinate with the EPA WA COR and EPA Region 6 technical expert(s) to update as necessary based on recent information, address comments received on, and finalize the presentation. As previously stated, any revisions to the presentation shall be based upon the results of ETV verification testing of RFID devices (see <http://www.epa.gov/nrmrl/std/etv/vt-ams.html#radio>). The contractor shall provide the presentation in the following general formats: a detailed version suitable for informational workshops, training sessions, or webinars; and an abbreviated version (15-20 slides) appropriate for presenting at technical conferences/meetings). The materials should be appropriate for the intended audience(s), which may include stakeholders; local, state, regional, and federal

government agencies; border patrols officers; highway transportation associations; enforcement/compliance officials; and others. The presentation materials shall be prepared in both English and Spanish language versions. In any materials discussing ETV-verified RFID products or other technologies, the products and/or vendors shall not be ranked in order of performance results. As needed, the contractor also shall provide graphics development and support to make final presentation materials visually appealing.

The contractor shall provide final draft version(s) of the presentation materials to the EPA WA COR and/or EPA technical expert(s) for review, and approval (by the EPA WA COR). All final products shall be subjected to technical and quality assurance review by the participating vendors, contractor staff, EPA, and expert peer reviewers, as appropriate. Any limitations to the data shall be addressed and discussed in the products, as appropriate. A peer-review process of at least 2 external experts shall be conducted by the contractor, collecting peer review feedback similar to that collected from the EPA peer review process using the Technical Manuscript Review Form (see **Appendix B**). The reviews shall assure that the products meet the needs of potential technology users and stakeholders such as local, state, regional, and federal officials. Based on feedback from the reviewers, the presentation materials shall be finalized.

Final electronic copies of all presentation materials, with related peer-review forms and comments, shall be sent in source file (e.g., MSWord 2007 PowerPoint) and Adobe Portable Document (.pdf) formats. The contractor shall also develop 508-compliant .pdf (and source) files or .html versions of the final presentation materials for inclusion on EPA web sites.

TASK 4: Outreach and Data Dissemination Activities

TASK 4.1: Presentation at Technical Conference/Meeting

The contractor shall arrange for presentation of the RFID verification results at a technical conference/meeting. Based on expertise criteria provided by the EPA WA COR and EPA technical expert(s), the contractor shall obtain an expert speaker to present at the meeting based on the presentation materials finalized under **Task 3** above. Criteria for and selection of the expert speaker will be provided via written technical direction from the EPA WA COR. The contractor's work plan shall include estimates to provide all costs associated with obtaining the expert speaker, including travel arrangements and event registration, as necessary.

The EPA's SmartWay Program co-sponsors a number of meetings throughout calendar year 2012 on shipping and hauling throughout the U.S. (e.g. the Mid-America Trucking Show or MATS). These conferences cover areas of international trucking trade, and include the target audience (e.g., trucking companies, shippers, etc.) required for these RFID outreach efforts. EPA has identified the following events as potential opportunities for presentation of the RFID verification results: The Commercial Vehicle Outlook

Conference to be held August 24-25, in Dallas TX, and the Annual Logistics and Manufacturing Symposium with dates to be determined in Laredo, TX.

The contractor shall provide the approved version of the RFID verification presentation to the speaker selected by the EPA WA COR for delivery at the conference/workshop event (see **Task 3**). EPA Region 6 technical experts(s) will be asked to provide contacts for each of these conferences. If no contacts are provided, the contractor should pursue presentation at conferences/workshop through the mechanisms outlined by the organizations hosting the events. The contractor shall arrange for attendance of the speaker selected by the EPA WA COR at 2 to 3 meetings/conferences in 2012. In the event that the contractor is not able to arrange for a presentation at an appropriate workshop or conference (e.g., due to lack of lead time, lack of exhibit space, etc.), the contractor shall research and make recommendations for similar technical conferences/meetings with a target audience appropriate for dissemination of the RFID verification results. The contractor shall provide the services outlined in this Task (4.1)—i.e., arrange for presentation of the RFID verification results—at an alternate technical conference/meeting as approved by the EPA WA COR.

NOTE: The EPA Project Officer and/or EPA WA COR must obtain prior approval from EPA's Office of International and Tribal Affairs (OITA) for any proposed foreign travel by an EPA contractor or subcontractor to meetings, conferences, or symposia to represent the ETV Program. The contractor shall not expend any funds directly related to **Task 4.1** until they have received approval via written technical direction from the EPA WA COR. The contractor will be required to submit any travel request involving international travel through the EPA Project Officer for coordination with OITA.

TASK 4.2: Exhibition at Technical Conference/Meeting

The contractor shall make arrangements for securing/ordering/paying for an exhibit at an annual shipping and hauling conference or symposium (preferably that includes logistics), such as the Annual Logistics and Manufacturing Symposium in Laredo, TX (<http://ldfonline.org/page.asp?page=19thAnnualSymposium>), including space, furniture, electrical, and computer lines. Based on expertise criteria provided by the EPA WA COR and EPA technical expert(s), the contractor shall obtain an expert to exhibit at the symposium on behalf of ETV. Criteria for the exhibit staffer will be provided via written technical direction from the EPA WA COR. The EPA WA COR shall have final approval of the exhibit staffer. The contractor's work plan shall include estimates to provide all costs associated with obtaining the exhibit staffer, including travel arrangements and event registration, as necessary.

EPA also plans to invite the verified RFID technology vendors to exhibit at the symposium along with the ETV Program. EPA will be responsible for contacting the vendors, inviting them to participate, and sending information on exhibit times, instructions, etc., to the technology vendors. The contractor shall arrange for shipping of ETV exhibit materials and expendables to and from the symposium and/or to and from the EPA WA COR as necessary. The contractor shall include instructions and completed

shipping materials with the exhibit for use by the ETV exhibit staffer/expert speaker. The contractor shall help coordinate with the designated staffer to ensure that they are familiar with exhibiting times, how to set-up the exhibit, return shipping instructions, etc. The contractor shall ensure that the ETV exhibits and any supplementary exhibit accessories are in good and working condition. The contractor shall take all precaution to ensure that the exhibit and materials are shipped and packed/unpacked properly to avoid damage to the exhibit/accessories.

The EPA Region 6 technical experts(s) should provide ideas for the best contacts at the Laredo Development Corporation (or equivalent organization) for inquiries about reserving exhibit space at the symposium. If no ideas/suggestions are received from the experts, the contractor will contact the Laredo Development Corporation (or equivalent organization) and determine the appropriate contacts.

TASK 4.3: Training Session Webinar Support

If practical, and budget permits, the contractor shall provide logistical and technical support for one (1) webinar or informational meeting/training session to disseminate ETV RFID verification results to potential technology users and stakeholders, including local, state, regional, and federal government agencies; border patrols officers; highway transportation associations; enforcement/compliance officials; and others. The webinar will be held between August and November 2012, will last up to one (1) day, and will include up to 120 participants. EPA Region 6 technical experts(s) will assist the contractor in identifying potential attendees and speakers and coordinating with government agencies and regional partners. If no assistance is received, the contractor shall identify potential attendees and speakers and coordinate with government agencies and regional partners. The contractor shall provide the full, EPA WA COR approved version of the RFID verification presentation to speakers for delivery during the webinar.

Webinar support may include the following:

- Make all necessary arrangements for setting up and conducting webinar services
- Host webinar events/materials on own site or provide access to a webinar service or site to manage these activities
- Develop draft and final invitations, agendas, logistical information sheets, and other materials for webinars, as needed; provide draft versions of all materials to the EPA WA COR and/or EPA technical expert(s) for review and approval
- Post .pdf or .html versions of final materials on the webinar site or other web sites
- Distribute (via email) electronic invitations, agendas, logistical materials, and other pre-webinar informational materials to potential participants
- Track participant responses and registrant information for webinars, e.g., through an on-line registration system or some other mechanism, and provide the EPA WA COR or EPA technical expert(s) with regular updates on confirmed participants for each webinar
- Develop guidelines for submission of webinar presentations to the contractor or uploaded directly to the webinar site and distribute guidelines to speakers

- Contact speakers for submission of presentation materials, abstracts, and short biographies as needed
- As needed, upload any speaker presentations, webinar materials, or other information to the webinar site or other web sites prior to the start of the webinar
- Send instructions for accessing webinar conferencing to participants
- Provide logistical support before and during webinars to ensure functionality and trouble-shoot in the event of any issues
- Prepare and forward a CD-ROM containing all presentation materials from each webinar (abstracts, bios, presentations, etc.) to the both EPA WA COR and EPA technical expert(s) within one (1) week from the conclusion of the webinar
- As necessary, the contractor shall develop both English and Spanish versions of any print and electronic materials required under this task.

TASK 4.3.1: Webinar Evaluation Report

For the above webinar, the contractor shall prepare a brief summary report of comments received on evaluation forms from webinar participants. The contractor shall provide an electronic copy of the source file (e.g., MSWord) for the summary evaluation report to the EPA WA COR and EPA technical expert(s) within two (2) weeks from the conclusion of the webinar. The contractor shall also provide original hard-copies (or scanned electronic copies) of completed evaluations forms to the EPA WA COR and EPA technical expert(s).

DELIVERABLES AND PROJECT SCHEDULE

All deliverables shall be submitted to the EPA WA COR according to the following schedule.

TASK 1: Prepare Work Plan	
Work plan due	In accordance with the contract clauses
TASK 2: Work Assignment Kick-Off Meeting	
Kick-off meeting (via conference call)	Within two (2) weeks of work assignment approval
TASK 3: Presentation Preparation and Finalization	
Draft full (detailed) version of presentation with revisions/updates due to EPA WA COR	Within two (2) weeks of work assignment approval
Draft abbreviated version of presentation due to EPA WA COR	Within three (3) weeks of work assignment approval
Final source files and .pdfs of full (detailed) and abbreviated versions of presentations due to EPA WA COR	Within one (1) week of receipt of comments from EPA
Final 508 compliant versions of the full (detailed) and abbreviated presentations	Within one (1) week of receipt of EPA approval on final versions

due to EPA WA COR	
TASK 4: Outreach and Data Dissemination Activities	
TASK 4.1: Presentation at Technical Conference/Meeting	
Presentation arrangements	To be completed for conferences/workshop dates from Task 4.1 (or later dates TBD in event that arrangements cannot be made in time for the Transporte Limpio workshops)
TASK 4.2: Exhibition at Technical Conference/Meeting	
Exhibition arrangements	To be completed by September 21-23, 2012
TASK 4.3: Training Session Webinar Support	
Support for webinar	On-going through 11/30/12 per written technical direction from EPA WA COR
	Original and duplicate CD-ROM containing all presentation materials from webinar due within one (1) week from conclusion of webinar
Subtask 4.3.1: Webinar Evaluation Report	Summary evaluation report and actual evaluation forms due two (2) weeks from conclusion of webinar

DELIVERABLE ACCEPTANCE CRITERIA

The following deliverable acceptance criteria will be used to assess deliverables submitted under Tasks 1 through 4 of this work assignment.

TASK 1: The contractor's work plan and cost estimate should be in accordance with the terms and conditions of the contract, and should contain a break-out clearly specifying estimates (LOE, ODCs, etc.) associated with performing each of the Tasks 1 through 4 (and subtasks) as outlined in this work assignment.

SPECIAL REPORTING

The contractor's Monthly Progress Report shall include a detailed description of any technical direction issued by the EPA WA COR and accepted by the contractor. The contractor shall maintain a list of all accepted technical direction issued during the work assignment. The contractor's Monthly Progress Report shall also include a break-out of cumulative costs (LOE, ODCs, etc.) associated with performing each of the Tasks 1 through 4 (and subtasks) as outlined in this PWS.

MANAGEMENT CONTROLS

Periodic meetings between the EPA WA COR and contractor are encouraged to discuss any questions that may arise during the performance or completion of this work assignment. At the EPA WA COR's discretion, these meetings may occur via teleconference or video conferences. The contractor shall document these meetings and submit copies of this correspondence to the EPA WA COR.

The EPA WA COR may identify EPA technical expert(s) for this work assignment. **Interaction between the contractor and any EPA technical expert(s) designated by the EPA WA COR is solely for the purpose of presenting and discussing the information, analyses, results or presentations related to this work assignment. The interaction will be technical communication, not technical direction.** Per the technical direction clause EPAAR 1552.237-71 of the contract, the EPA PO COR and the EPA WA COR or alternate EPA WA COR are the only representatives of the CO authorized to provide technical direction.

In all meetings, conferences, symposia, etc. participated in as a part of satisfying the terms of this work assignment, contractor personnel shall be clearly identified through the use of name badges that indicate their corporate affiliation. Contractor personnel shall clearly identify themselves as contractors when contacting workshop participants, speakers or other individuals or organizations during the performance of this effort.

The contractor shall ensure that the work done under this project does not contain any real or apparent personal or organizational conflicts of interest.

The contractor shall maintain the confidentiality of any confidential business information collected as part of this effort.

The contractor shall comply with Government Printing Office guidelines during the performance of this effort.

The contractor shall comply with Paperwork Reduction Act guidelines during the performance of this effort.

The contractor shall inform the EPA WA COR verbally or in writing within two (2) businesses day if any significant problems arise, as well as any corrective actions and potential impacts on project deliverables, costs, etc.

TRAVEL

Per the contract clause Local LC-31-08, Approval of Contractor Travel, any non-local travel directly chargeable to this work assignment shall be submitted and approved by the proposed travel dates as identified by the EPA WA COR via technical direction.

SEE APPENDIX A – Draft Presentation: “EPA ETV Verification of RFID Technologies” (developed under EP-C-08-010, WA 1-06)

SEE APPENDIX B – EPA technical manuscript review form, EPA Form 363

EPA ETV Verification of RFID Technologies

Dr. Carlos Rincon, EPA Region 6

Ms. Debra Tellez, EPA Region 6



ETV Program

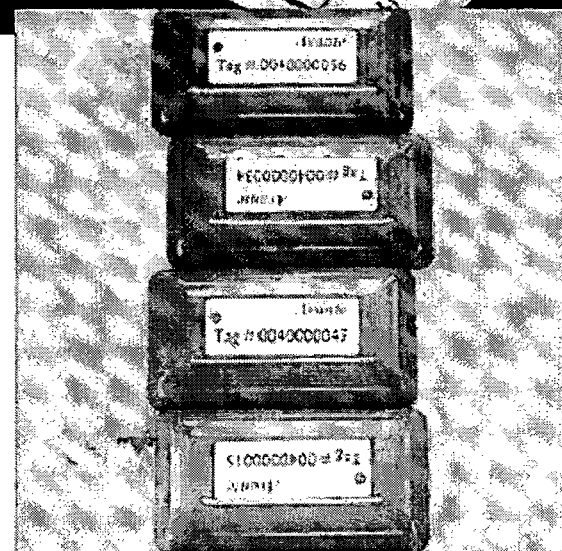
- Initiated by EPA in 1995
 - Accelerate acceptance of innovative technologies in the domestic and international marketplace
- Objective
 - Generate credible third-party performance data so that technology buyers and users can make informed purchase, application, and permitting decisions
- Key Program Elements
 - Open to all commercial technologies
 - Stakeholder involvement
 - Program outreach
 - High level of quality oversight
 - Testing targeted to technology users
 - *Not an approval or ranking process*
- Website
 - <http://www.epa.gov/etv>

Radio Frequency Identification (RFID)

- RFID Tag
 - Applied to or incorporated into a product
 - Identifies and tracks product using radio waves
 - Contains at least two parts
 - Integrated circuit for storing and processing information and modulating and demodulating a radio-frequency signal
 - Antenna for receiving and transmitting the signal
 - Three types
 - Active
 - Passive
 - Battery-assisted passive

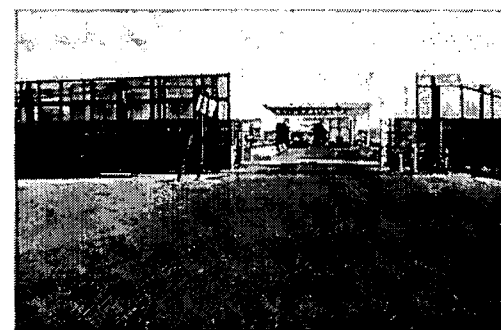
RFID for Hazardous Waste Package Tracking

- ETV-verified technologies used for hazardous waste tracking
- Assist with hazardous waste transportation security
- Both technologies use active RFID



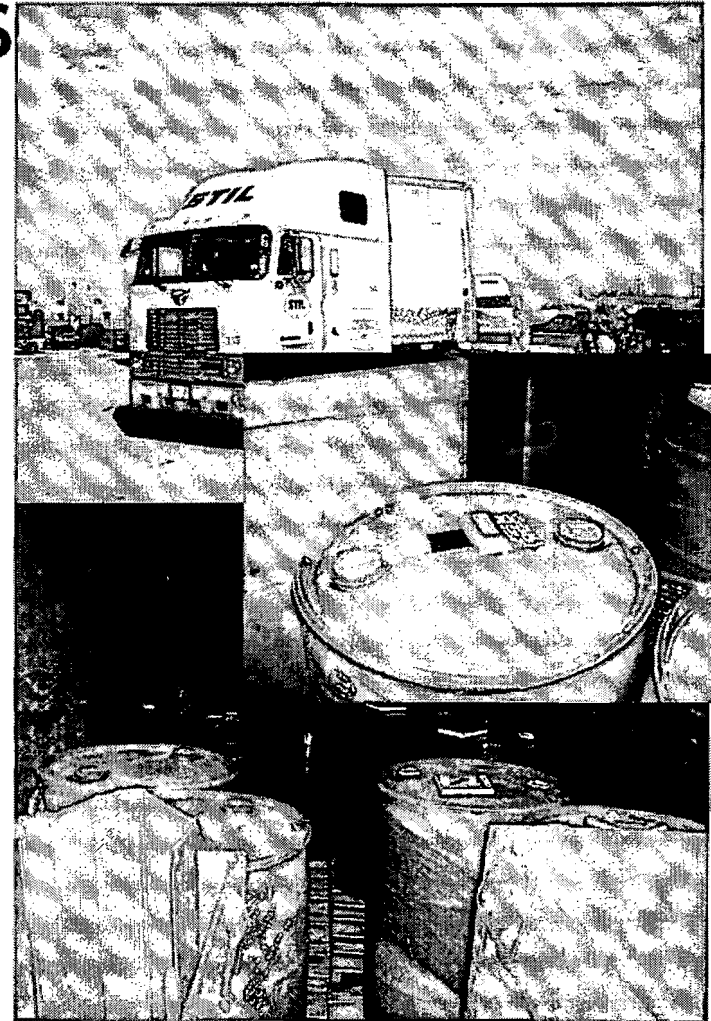
RFID Verification

- Verification test conducted near El Paso, Texas, in March 2009
 - U.S.-Mexico and U.S.-only routes
- Collaborative effort
 - EPA OECA, OAR, and Region 6
 - New Mexico Border Authority and Department of Public Safety
 - Texas Transportation Institute
 - BorderWriting
 - Servicio de Transporte Internacional y Local
 - Mexican officials
- Two vendors participated
 - Private Pallet Security Systems (P2S2)
 - Avante International Technology
- Testing involved evaluation of tag and reader performance



Tagged Hazardous Waste Containers

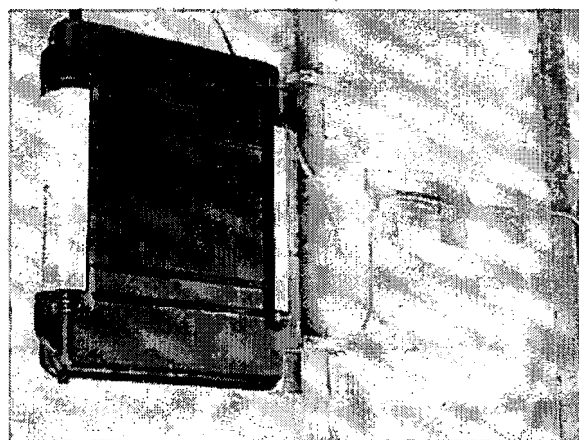
- Tags fastened to containers in the truck
- Used steel and plastic 55 gallon drums filled with water and corrugated boxes
- Four of each container placed in trailer
- Loosely and tightly packed configurations



ETV ✓

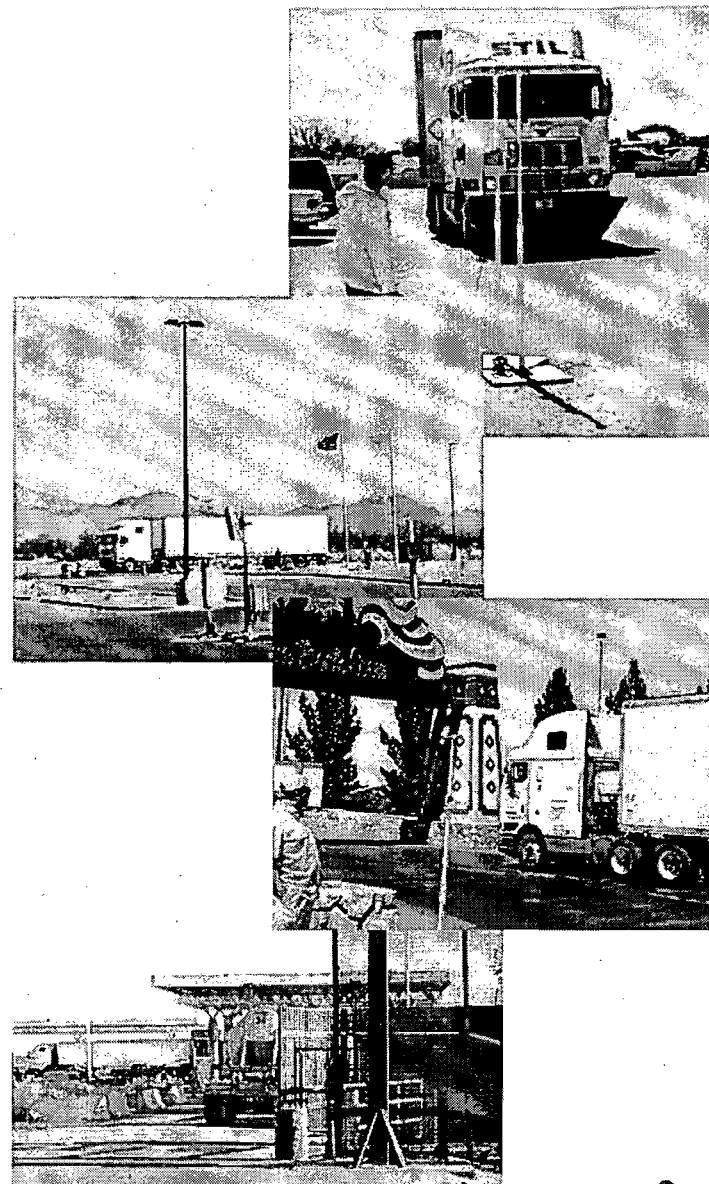
External and In-Truck Readers

- Avante
 - External roadside readers (powered by battery)
 - In-truck reader (Relayer) which included real-time uplinking and tracking with GPS coordinates
- P2S2
 - In-truck reader with external transceiver
 - Real-time uplinking with GPS coordinates



Read Locations

- NM Border Authority
 - Reads at 5-70 feet using external readers
- NMDOT Inspection Facility
 - 15 mph and 25 mph reads
- U.S. route included highway and street driving and casino parking lot entrance
- Mexico route included Port of Entry and highway driving



U.S. Route

1600 m
4800 ft

Santa
Teresa
Airport

Columbus Rd

Santa Teresa

136

178

184

273

1100 ft

Street Map

Fran
Mou
Stat

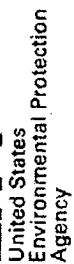
Montaya West Drain

Sunland Park

Rancho Anapra

Puerto De Anapra

ETV

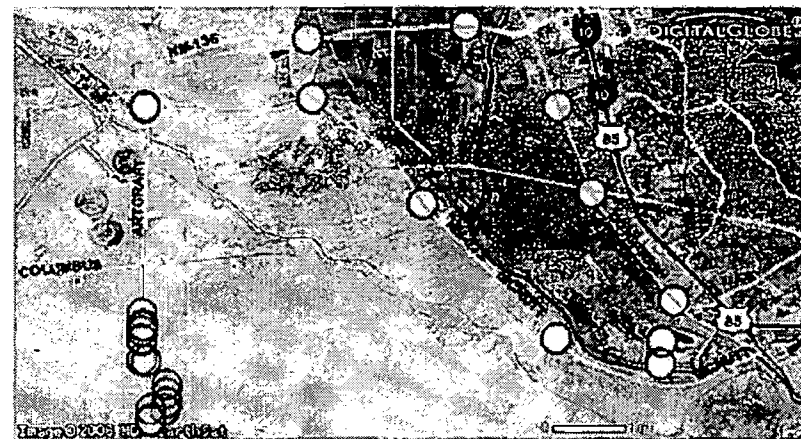
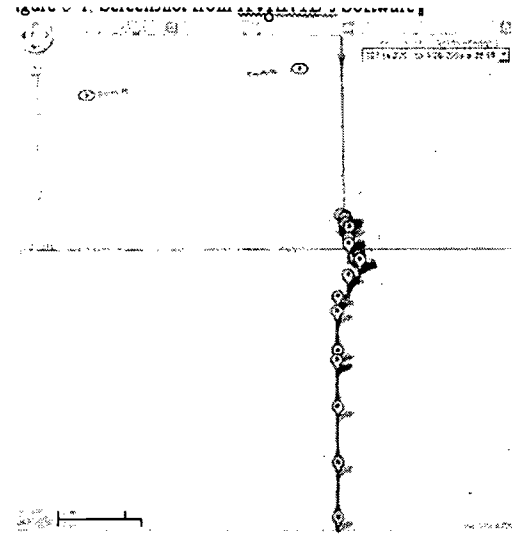


Mexico Route



Uplinked Tracking Data

- Avante and P2S2
 - GPS tracking
 - RFID identification
 - Panic button
 - Route deviation alerts
 - User-friendly software
- Avante
 - Cell phone coverage a factor
- P2S2
 - Web-based



Verification Results

- Avante
 - Tag readings
 - External reader: 86-94% accurate across three routes
 - Uplinked data: 68-95% accurate across three routes
 - Collision tests
 - Three tests each resulted in 100% accuracy
 - Two tests resulted in 75% and 92% accuracy
 - No indication environmental conditions impacted results
 - Cell phone coverage affected data completeness following uplinking
 - Avante addresses this in final report

Verification Results

- P2S2
 - Tag readings
 - 99-100% accurate across four routes
 - Collision tests
 - Three tests each resulted in 100% accuracy
 - One test resulted in 92% accuracy
 - Environmental conditions did not influence evaluations but could affect performance in actual use
 - External mounting of communication module could alert to value of goods on truck

Final Reports

- Reports and statements
 - Include detailed information on:
 - Accuracy
 - Precision
 - Interference with other RFID signals
 - Influence of confounding factors
 - Operational factors
 - <http://www.epa.gov/nrmrl/std/etv/vt-ams.html#radio>
 - Avante:
<http://www.epa.gov/nrmrl/std/etv/pubs/600r09106.pdf>
 - P2S2:
<http://www.epa.gov/nrmrl/std/etv/pubs/600r09107.pdf>

APPENDIX B

Technical Manuscript Review Form

Title <div style="border: 1px solid black; width: 100%; height: 50px;"></div>		Author(s) <div style="border: 1px solid black; width: 100%; height: 50px;"></div>
Date Review Requested <div style="border: 1px solid black; width: 100%; height: 30px;"></div>	Date Review Required <div style="border: 1px solid black; width: 100%; height: 30px;"></div>	Project Officer/Organization/Address <div style="border: 1px solid black; width: 100%; height: 30px;"></div>
Type of Publication/Audience <div style="border: 1px solid black; width: 100%; height: 50px;"></div>		Reviewer/Organization/Address <div style="border: 1px solid black; width: 100%; height: 90px;"></div>
Review Coordinator (e.g., PO, TIM, Supervisor) <div style="border: 1px solid black; width: 100%; height: 50px;"></div>		

You are asked to review and comment on the attached manuscript. Feel free to make notations on the manuscript as well as in the comments section below, particularly regarding your recommendations for revisions. If you are unable to review the manuscript by the required date, please return it now. Your suggestions for alternate or additional reviewers will be welcomed.

SUMMARY RATING			RECOMMENDATIONS
Please rate the manuscript as follows:	Satisfactory	Unsatisfactory	
Content & Scope	<input type="checkbox"/>	<input type="checkbox"/>	G (1) <input type="checkbox"/> Acceptable as is G (2) <input type="checkbox"/> Acceptable after minor revisions G (3) <input type="checkbox"/> Acceptable after major revisions G (4) <input type="checkbox"/> Not acceptable If you have checked either 3 or 4, please specifically state reason(s) in the comments space below.
Organization & Presentation	<input type="checkbox"/>	<input type="checkbox"/>	
Quality of data & validity of analytical techniques	<input type="checkbox"/>	<input type="checkbox"/>	
Soundness of Conclusions	<input type="checkbox"/>	<input type="checkbox"/>	
Editorial Quality	<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify) <div style="border: 1px solid black; width: 150px; height: 15px;"></div>	<input type="checkbox"/>	<input type="checkbox"/>	
<div style="border: 1px solid black; width: 150px; height: 15px;"></div>	<input type="checkbox"/>	<input type="checkbox"/>	
			Reviewer's Signature _____ Date _____

Comments: